CLAIMS

An extensible and replaceable layered component computing arrangement residing on a computer coupled to a computer network, the layered arrangement comprising:

a software component architecture layer interfacing with an operating system to control the operations of the computer, the software component architecture layer defining a plurality of computing components; and

a network component layer for developing network navigation components that provide services directed to the computer network, the network component layer coupled to the software component architecture layer in integrating relation to facilitate communication among the computing and network navigation components.

- 2. The computing arrangement of Claim 1 wherein the network navigation components are objects and wherein the network component layer comprises application programming interfaces delivered in the form of objects in a class hierarchy.
- 3. The computing arrangement of Claim 2 wherein the application programming interfaces include a CyberItem class for constructing a first network navigation object representing a network resource available at any location on the computer networks.

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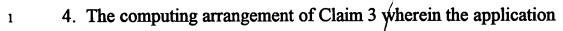
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- programming interfaces further include a CyberStream class for constructing
- a second network navigation object representing a data stream for transfering
- 4 information among objects of the arrangement.
- 5. The computing arrangement of Claim 4 wherein the first network
- navigation object is a CyberItem object and the second network navigation
- object is a CyberStream object, and wherein the CyberItem object spawns the
- 4 CyberStream object to obtain information from the network resource that the
- 5 CyberItem object represents.
- 6. The computing arrangement of Claim 4 wherein the application
- programming interfaces further include a CyberExtension class for
- constructing a third network navigation object representing additional
- behaviors provided to computing components of the software component
- architecture layer to thereby enable communication between the computing
- 6 components and the network navigation components.
 - 7. An extensible and replaceable layered component computing arrangement for providing services directed to information available on computer
- networks, the computing arrangement comprising:
 - a processor;
- s an operating system;

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a software component architecture layer coupled to the operating
system to control the operations of the processor, the software component
architecture layer defining a plurality of computing components; and

a network component layer for creating network navigation components configured to search and obtain information available on the computer networks, the network component layer integrally coupled to the software component architecture layer to ensure communication among the computing and network navigation components

and B1